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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application of: Yguerabide *et al.*

Confirmation No. 5342

Application No.: 09/932,128

Group Art Unit: 1641

Filed: August 16, 2001

Examiner: YANG, NELSON C.

For: Analyte Assay Using Particulate Labels Attorney Docket No.: 11032-021

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.56**

Commissioner for Patents  
P.O. Box 1450  
Mail Stop PATENT APPLICATION  
Alexandria, VA 22313-1450

S I R:

In accordance with the duty of disclosure imposed by 37 C.F.R. § 1.56 to inform the Patent and Trademark Office of all references coming to the attention of each individual associated with the filing or prosecution of the subject application, which are or may be material to the patentability of any claim of the application, Attorneys for Applicants hereby direct the Examiner's attention to the references A01 through A35, B1 and C1 through C39 listed on the attached revised form PTO 1449, copies of which are enclosed herewith.

Copies of references A01 through A35, B1 and C1 through C39 are of record in parent Application No. 08/ 953,713, filed October 17, 1997, now U.S. Patent No. 6,586,193, which is relied upon for a filing date under 35 U.S.C. § 120. Accordingly, pursuant to 37 C.F.R. § 1.98(d), Applicants are not submitting additional copies of these references. No references are submitted herewith, copies of any reference cited herein will be furnished at the examiner's request.

Applicants respectfully request that the Examiner review the foregoing references and that the references be made of record in the file history of the instant application.

Pursuant to 37 C.F.R. § 1.97(b), since this Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits, it is submitted that no fee is due in connection herewith. However, should the Patent and Trademark Office determine otherwise, please charge the required fee to Jones Day Deposit Account No. 503013; a duplicate of this sheet is enclosed.

Respectfully submitted,

Date: April 5, 2004

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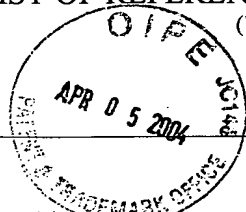
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## LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)



ATTY DOCKET NO.

11032-021

APPLICATION NO

09/932,128

APPLICANT

Yguerabide *et al.*

FILING DATE

August 16, 2001

GROUP

1641

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A01	3,939,350	Feb, 1976	Kronick <i>et al.</i>			
	A02	3,975,084	Aug, 1976	Block.			
	A03	4,313,734	Feb, 1982	Leuving.			
	A04	4,420,558	Dec, 1983	De Mey <i>et al.</i>			
	A05	4,446,238	May, 1984	De Mey <i>et al.</i>			
	A06	4,480,042	Oct, 1984	Craig <i>et al.</i>			
	A07	4,597,944	Jul, 1986	Cottingham			
	A08	4,647,544	Mar, 1987	Nicoli <i>et al.</i>			
	A09	4,752,567	Jun, 1988	De Brabander <i>et al.</i>			
	A10	4,851,329	Jul, 1989	Cohen <i>et al.</i>			
	A11	5,017,009	May, 1991	Scutt <i>et al.</i>			
	A12	5,079,172	Jan, 1992	Hari <i>et al.</i>			
	A13	5,100,805	Mar, 1992	Ziege <i>et al.</i>			
	A14	5,151,956	Sep, 1992	Bloemer.			
	A15	5,202,231	Apr, 1993	Drmanac <i>et al.</i>			
	A16	5,248,772	Sep, 1993	Siiman <i>et al.</i>			
	A17	5,257,087	Oct, 1993	Furuya.			
	A18	5,274,431	Dec, 1993	Kuroda.			
	A19	5,286,452	Feb, 1994	Hansen.			
	A20	5,294,369	Mar, 1994	Shigekawa <i>et al.</i>			
	A21	5,305,073	Apr, 1994	Ford.			
	A22	5,311,275	May, 1994	Taniguchi <i>et al.</i>			
	A23	5,350,697	Sep, 1994	Swope <i>et al.</i>			
	A24	5,432,099	Jul, 1995	Ekins.			
	A25	5,552,086	Sep, 1996	Siiman <i>et al.</i>			
	A26	5,571,726	Nov, 1996	Brooks <i>et al.</i>			
	A27	5,585,241	Dec, 1996	Lindmo			
	A28	5,599,668	Feb, 1997	Stimpson <i>et al.</i>			
	A29	5,734,498	Mar, 1998	Krasieva <i>et al.</i>			
	A30	5,841,534	Nov, 1998	Lorenz			
	A31	5,843,651	Dec, 1998	Stimpson <i>et al.</i>			
	A32	5,851,777	Dec, 1998	Hunter <i>et al.</i>			
	A33	5,981,180	Nov, 1999	Chandler <i>et al.</i>			
	A34	6,294,327	Sep, 2001	Walton <i>et al.</i>			
	A35	6,309,822	Oct, 2001	Fodor <i>et al.</i>			

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
B01	WO 98/37417	Aug, 1998	PCT				

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

C01	Peter Cooper Stevenson, "Some Experiments On Colloidal Gold", Dissertation, Princeton, 1949, pp. 1-83.
C02	Yguerabide and Yguerabide, "Light-scattering submicroscopic particles as highly fluorescent analogs and their use as tracer labels in clinical and biological applications." Anal Biochem. 262(2):137-56 (1998).
C03	Yguerabide and Yguerabide, "Light-scattering submicroscopic particles as highly fluorescent analogs and their use as tracer labels in clinical and biological applications." Anal Biochem. 262:157-176 (1998).
C04	DeWaele et al., Techniques in Immunochemistry, edited by Bullock and Petrusz, Academic Press, 2:1 (1983).
C05	Elghanian et al., "Selective Colorimetric Detection of Polynucleotides Based on the Distance-Dependent Optical Properties of Gold Nanoparticles," Science 1078-1081 (Aug. 22, 1997).
C06	Kerker, The Scattering of Light and Other Electromagnetic Radiation, Academic Press (1969).
C07	Shalon et al., "A DNA Microarray System for Analyzing Complex DNA Samples Using Two-Color Fluorescent Probe Hybridization," Genome Research 639-645 (1996).
C08	Silva, "A scanning near-field optical microscope with magneto-optic kerr effect contrast for the imaging of magnetic domains with 200 A resolution," Dissertation (1994).
C09	Zsigmondy, Colloids and the Ultramicroscope--A Manual of Colloid Chemistry and Ultramicroscopy, John Wiley & Sons (1914).
C10	Allara et al., "Spontaneously Organized Molecular Assemblies. 1. Formation, Dynamics, and Physical Properties of n-Alkanoic Acids Adsorbed from Solution on an Oxidized Aluminum Surface," Langmuir 1:45-52 (1984).
C11	Bain et al., "Formation of Monolayer Films by the Spontaneous Assembly of Organic Thiols from Solution onto Gold," Journal of the American Chemical Society 111:321-335 (1989).
C12	Bloemer et al., "Optical properties of submicrometer-size silver needles," Physical Review B 37:8015-8021 (1988).
C13	Bohmer and King, "Immuno-Gold Labeling for Flow Cytometric Analysis," Journal of Immunological Methods 74:49-57 (1984).
C14	Bohren et al., Absorption and Scattering of Light by Small Particles, John Wiley & Sons, pp. 316-319, pp. 356-357, and pp. 368-375 (1983).
C15	DeBrabander et al., "The Use of Submicroscopic Gold Particles Combined with Video Contrast Enhancement as a Simple Molecular Probe for the Living Cell," Cell Motility and the Cytoskeleton 6:105-113 (1986).
C16	Eversole and Broida, "Size and Shape Effects in Light Scattering From Small Silver, Copper and Gold Particles," Physical Review B 15:1644-1654 (1977).
C17	Geerts et al., "Nanovid microscopy," Nature 351:765-766 (1991).
C18	Geoghegan et al., "The Detection of Human B Lymphocytes by Both Light and Electron Microscopy Utilizing Colloidal Gold Labeled Anti-Immunoglobulin," Immunological Communications 7:1-12 (1978).
C19	Heller and Pugh, "Steric Stabilization of Colloidal Solutions by Adsorption of Flexible Macromolecules," Journal of Polymer Science 47:203-217 (1960).
C20	Hiemenz, "Ch. 5 -Light Scattering," in Principles of Colloid and Surface Chemistry, 2nd edition, Marcel Dekker, Inc., pp. 223-286 (1986).
C21	Horisberger, "Colloidal Gold: A Cytochemical Marker for Light and Fluorescent Microscopy and for Transmission and Scanning Electron Microscopy," Scanning Electron Microscopy 2:9-31 (1981).
C22	Hunter, "Ch. 3 -Particle Size and Shape," in Foundation of Colloid Science, vol. 1, pp. 104-167 (1991).
C23	Klein and Metz, "Color of Colloidal Silver Sols in Gelatin," Photographic Science and Engineering 5:5-11 (1961).
C24	Kreibig and Zacharias, "Surface Plasma Resonances in Small Spherical Silver and Gold Particles," Z. Physik 231:128-143 (1970).
C25	Nuzzo and Allara, "Adsorption of Bifunctional Organic Disulfides on Gold Surfaces," Journal of the American Chemical Society 105:4481-4483 (1983).
C26	Okano et al., "Using Microparticle Labeling and Counting for Attomole-Level Detection in Heterogeneous Immunoassay," Analytical Biochemistry 202:120-125 (1992).
C27	Roth, "The Colloidal Gold Marker System for Light and Electron Microscopic Cytochemistry," Immunocytochemistry 2:217-284 (1983).
C28	Schafer et al., "Transcription by single molecule of RNA polymerase observed by light microscopy," Nature 352:444-448 (1991).

	C29	Shaw et al., in Introduction to Colloid and Surface Chemistry, 2nd edition, pp. 41, 46-54 (1970).
	C30	Stimpson et al., "Real-time detection of DNA hybridization and melting on oligonucleotide arrays by using optical wave guides," Proc. Natl. Acad. Sci. USA 92:6379-6383 (1995).
	C31	Stolz, Time-Resolved Light Scattering from Excitons, Springer Tracts, vol. 130, pp. 72-85 (1994).
	C32	Vener et al., "A Novel Approach to Nonradioactive Hybridization Assay of Nucleic Acids Using Stained Latex Particles," Analytical Biochemistry 198:308-311 (1991).
	C33	Wiegel, "Über die Farben des kolloiden Silbers und die Miesche Theorie," Zietschrift fur Physik, Bd., 136:642-653 (1954).
	C34	Shalon et al., "A DNA Microarray for Analyzing Complex DNA Samples Using Two-color Fluorescent Probe Hybridization," Cold Spring Harbor Laboratory Press 6:639-645 (1996).
	C35	Chee et al., "Accessing Genetic Information with High-Density DNA Arrays," Science 274:610-614 (1996).
	C36	Jarvik et al., "CD-Tagging: A New Approach to Gene and Protein Discovery and Analysis," BioTechniques 20:896-904 (1996).
	C37	Hatano et al., "Application of Optical Chromatography to Immunoassay," Anal. Chem 69:2711-2715.
	C38	Kaneta et al., "Theory of Optical Chromatography," Anal. Chem. 69:2701-2710 (1997).
	C39	Elghanian et al., "Selective Colorimetric Detection of Polynucleotides Baswed on the Distance-Dependent Optical Properties of Gold Nanoparticles," Science 277:1078-1081 (1997).

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.